

WEST VIRGINIA DIVISION OF HIGHWAYS
WORKSHEET FOR CALCULATING
BULK SPECIFIC GRAVITIES OF AGGREGATE (G_{sb}),
WHEN USING RECYCLED MATERIALS (RAP)

Note: This worksheet is applicable only for mixtures containing reclaimed material (RAP)

$$G_{sb} = \frac{A_p}{\frac{P_1}{G_1} + \frac{P_2}{G_2} + \dots + \frac{P_n}{G_n} + \frac{P_{rap}}{G_{serap}}}$$

G_{sb} = bulk specific gravity for the total aggregate

A_p = total aggregate = 100 percent

P_1, P_2, P_n, P_{rap} = percentage of total aggregate

G_1, G_2, G_n = bulk specific gravities of aggregates

G_{serap} = effective specific gravity of the recycled aggregate

Note: When using mineral filler use the apparent specific gravity

Component Aggregate Type	Percent of Total Aggregate	Bulk Specific Gravity	Percent RAP	G_{serap}	$G_{sb} = 100 / [P_1/G_1 + P_2/G_2 + \dots + P_n/G_n + P_{rap}/G_{serap}]$
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* Report this value when calculating VMA (Attachment #6)

Note: Report the following values to the nearest thousandth (0.001):
 G_{sb} , G_{serap} and bulk specific gravity